

REMARKS

The foregoing amendment amends Claim 36. Now in the application is Claim 36, which is independent, Claims 1-34 have been withdrawn without prejudice to filing one or more continuation or divisional applications based on the same or similar claims. Claim 35 is cancelled. No new matter has been added.

Claim Amendments

Claim 36 has been amended to clarify that the excess supply amount of the reactant gas is supplied to the fuel cell before or in advance of the variation of the electrical load.

Support for the amendments to Claim 36 can be found at least on page 2, lines 19-27 of the specification.

Claim rejections under 35 U.S.C. §112, 2nd paragraph

Claim 36 stands rejected under 35 U.S.C. §112, 2nd paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner contends that “it is unclear what “synthetic output characteristic” and “current-voltage characteristic representation” mean.

Applicants respectfully direct the Examiner’s attention to the summary of the Summary of the Invention section (e.g., second full paragraph) of the Specification and to pages 16 and 17 of the Specification. These passages describe the “synthetic output characteristic” and “current-voltage characteristic representation” graphically depicted in Figure 10A. Accordingly, Applicants contend that one skilled in the art after reading the text in the Summary of the Invention and the text on pages 16 and 17 in the Detailed Description in connection with Figures 10A and 10B descriptions would be able to obtain or generate the graphically depicted “synthetic output characteristic” and “current-voltage characteristic representation” plots.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claim 36 under 35 U.S.C. §112, 2nd paragraph.

Claim rejections under 35 USC § 103

Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kimura et al. (5,964,309) in view of JP 08-214452 (Takeshi). Applicants respectfully traverse the rejection based on the foregoing amendments and the following argument.

In addition to the lack of teachings regarding capacitors noted by the Examiner, Applicants submit that the gas shortage state addressed by Kimura is different from the gas shortage state addressed by the fuel cell power supply unit of Claim 36. In Kimura, when charging is required, the fuel cell supplies not only the voltage required for the load current, but also the voltage required for charging. The fuel cell of Kimura supplies more voltage than the voltage required just for the load current, and if the fuel cell is supplied with the reacting gas just in the amount required for the load current, the system of Kimura would experience a shortage of the reacting gas. Thus, the system of Kimura is adapted to supply the reacting gas for outputting the voltage for required charging as well as the reacting gas for outputting the voltage for the load current. As such, Kimura's system supplies reacting a gas after the variation in the load. See, Figure 7 of Kimura.

Takeshi does not cure the factual deficiencies of Kimura. In Takeshi, the internal resistance is used to determine whether the electric double layer capacitor is in the degradation acceleration state. Takeshi is concerned with preventing the degradation acceleration state of the electric double layer capacitor and proposes a current limiting circuit to prevent the degradation. Takeshi is not concerned with determining an excess supply amount of a reacting gas.

In contrast, the fuel cell power supply unit of Claim 36 recites, amongst other features, in *advance of the variation of electrical load*, supplying the reacting gas in an amount which includes the excess supply amount in addition to an equilibrium reacting gas supply amount.

Thus for at least this reason, neither Kimura nor Takeshi alone or in combination teach or suggest each and every element of Claim 36. Accordingly, Applicant requests the Examiner to reconsider and withdraw the rejection to Claim 36 under 35 U.S.C. § 103.

CONCLUSION

In view of the above amendments and arguments, Applicants contend the pending application is in condition for allowance.

Dated: January 28, 2008

Respectfully submitted,

By David R. Burns
David R. Burns, Esq.
Registration No.: 46,590
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant